APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,315	11/10/2003	Sachin Doshi	884.A59US1	4452

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EXAMINER
PARK, ILWOO

ART UNIT	PAPER NUMBER
2182	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/21/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<table>
<tr><td rowspan="2"></td><td>Application No.</td><td>Applicant(s)</td></tr>
<tr><td>10/705,315</td><td>DOSHI ET AL.</td></tr>
<tr><td rowspan="2">Office Action Summary</td><td>Examiner</td><td>Art Unit</td></tr>
<tr><td>Ilwoo Park</td><td>2182</td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _05 October 2006_.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-32_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) _25-27_ is/are allowed.

6)☒ Claim(s) _1-3,5-16,18-24 and 28-32_ is/are rejected.

7)☒ Claim(s) _4,17_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-32 are presented for examination.

Response to Arguments

2.   Applicant's arguments filed 10/5/2006 have been fully considered but they are

not persuasive. Applicant argues in substance that the average volume of Scifres is

always less than the usage limit [Scifres: figs. 6A, 6B, paras. 0049, 0050] while the

average shared resource value claimed by the Applicant is greater than the guaranteed

minimum amount. The Examiner partially agrees. Claim (e.g., independent claims 1, 11,

19, 28) does not define the 'average shared resource value' greater than the

'guaranteed minimum amount' until its dependent claim (e.g., claims 4, 17); in other

words, there is no relationship about the amounts of resource between the 'average

shared resource value' and the 'guaranteed minimum amount' at least in the

independent claims.

        Further, Applicant argues none of prior arts not combinable because of no

motivation or no reasonable expectation of success in the proposed combinations;

likely, Ruutu, uses an absolute capacity to regulate switching, teaches away from using

an average capacity associated with a guaranteed minimum value of the resource of

Applicant. For this point, Ruutu uses an average capacity ("average quota" in paragraph

0043) associated with a guaranteed minimum value of the resource ("above mentioned

channel quota is guaranteed for each channel" in paragraph 0043).

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

4.   Claims 1-3, 5, 6, 11-13, 18-23, 28, and 32 are rejected under 35 U.S.C. 102(e)

as being anticipated by Scifres et al. [US 2003/0225905 A1].

As for claim 1, Scifres et al teach a method, comprising:

controlling a data flow associated with at least one of a selected number of ports

[subset of identified usage devices 48 in paragraph 0032 and fig. 3] having a first actual

value above [flow volume 32 exceeding its corresponding volume limit 34 paragraph

0032 and fig. 3] a determined average shared resource usage value [see determined

volume limit 34 according to an average flow volume and a usage pattern for the flows

26 in paragraph 0049] associated with the selected number of ports sharing a resource,

wherein the selected number of ports each use [subset of identified usage devices 48

exceeding its corresponding volume limit 34 paragraph 0032 in paragraph 0032 and fig.

3] an amount of the resource greater than a guaranteed minimum amount [usage

restricted above the volume limit 34 in paragraphs 0050, 0065 and fig. 6A] of the

resource.

5.   As for claim 2, Scifres et al teach determining an average shared resource usage

value [determining the volume limit in paragraph 0049].

6.   As for claim 3, Scifres et al teach a data flow being associated with a restricted

flow usage level, which is below the maximum flow usage level [see page 8, claim 1 and

paragraph 0048]. Therefore, the control step is removed once a portion of the flow rate

is allocated according to the selected restriction rules.

7.   As for claim 5, Scifres et al teach adjusting the selected number of ports to

provide a scaled selected number of ports based on a port speed associated with a first

port and a port speed associated with a second port, wherein the first port and the

second port are included in the selected number of ports [usage limit selected form sets

of volume limit and rate limit in paragraph 0012].

8.   As for claim 6, Scifres et al teach repeatedly determining the determined average

shared resource usage value associated with the selected number of ports [repeating

said computing, comparing, identifying, and associating steps in page 8, claims 1, 4,

and 5].

9.   As for claim 11, Scifres et al teach a method for controlling a data flow.

Accordingly, Scifres et al also teach an article comprising a machine-accessible medium

having associated data, wherein the data, when accessed, results in a machine

performing these steps. Therefore, the present claim is rejected under the same

rationale.

10.   As for claims 12, 13, and 18, Scifres et al also teach an article comprising a

machine-accessible medium having associated data, wherein the data, when accessed,

results in a machine performing these steps. Therefore, the present claim is rejected

under the same rationale.

11.   As for claim 19, Scifres et al teach a method for controlling a data flow

associated with at least one of a selected number of ports. Accordingly, Scifres et al

also teach an apparatus for implementing the cited method. Therefore, the present

claim is rejected under the same rationale.

12.   As for claims 20-22, Scifres et al also teach an apparatus for implementing the

cited method. Therefore, the present claim is rejected under the same rationale.

13.   As for claim 23, Scifres et al teach a network processor [processing agent 22 in

fig. 3].

14.   As for claim 28, Scifres et al teach a method for controlling a data flow

associated with at least one of a selected number of ports. Accordingly, Scifres et al

also teach a system for implementing the cited method. Therefore, the present claim is

rejected under the same rationale.

15.   As for claim 32, Scifres et al teach a communications medium coupled to the

connector [fig. 1].

Claim Rejections - 35 USC § 103

16.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

17.   Claims 7-10, 14-16, 30, and 31 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Scifres et al. [US 2003/0225905 A1] in view of Ruutu et al. [US

2003/0123392 A1].

As for claims 7 and 8, Scifres et al teach controlling a data flow [see Abstract, "flow allocation"] associated with at least one of the selected number of ports. The reference also teaches "repeatedly" performing the "computing, comparing, identifying, and associating steps" [see Page 8, claim 5]. However, Scifres et al do not specify a dynamic threshold value or setting this value as a sum of the determined average shared resource usage value and a delta value. Regarding this limitation, Ruutu et al. teaches a dynamic sharing mechanism [see Abstract] and sets a nominal capacity to each data flow and additional capacity is shifted from a first flow to a second flow. At the time of the invention, one of ordinary skill in the art would have been motivated to combine the cited disclosures in order to reduce the number of packet drops during congestion and improving network performance, as taught by Ruutu et al.

18. As for claim 9, Scifres et al teach determining a value according to speed [see Page 5, paragraph 0049, "rate"] and overall usage value [see "usage pattern"]. However, this reference does not specify a delta value. Ruutu et al teach setting a nominal capacity to each data flow and shifting an additional capacity from a first flow to a second flow when its nominal capacity has been exceeded. This implements a dynamic buffer-sharing mechanism [see Abstract].

19. As for claim 10, Scifres et al do not teach the resource as a memory. Ruutu et al teach a memory sharing mechanism [see Abstract]. At the time of the invention, one of ordinary skill in the art would have been motivated to combine the cited disclosures for the reasons stated above.

20.   As for claims 14-16, the combination of references also teaches an article

comprising a machine-accessible medium having associated data, wherein the data,

when accessed, results in a machine performing these steps. Therefore, the present

claims are rejected under the same rationale.

21.   As for claims 30-31, the combination of references also teaches the system for

implementing the method. Therefore, the present claims are rejected under the same

rationale.

22.   Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scifres

et al. [US 2003/0225905 A1] in view of Liang [US 5,933,427 A].

        As for claim 24, the Scifres et al reference teaches a network switch [paragraph

0040]; however, the Scifres et al reference does not explicitly teach the network switch

is a Layer 2 Ethernet switch. However, Liang teaches a Layer 2 Ethernet switch [see

col. 2, lines 9-10]. At the time of the invention, one of ordinary skill in the art would have

been motivated to modify the cited combination of disclosures in order to implement a

common switch for a ubiquitous Ethernet LAN, as taught by Liang.

23.   Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scifres

et al. [US 2003/0225905 A1] in view of Roberts [US 6,104,712 A].

        As for claim 29, Scifres et al. reference does not teach an omni directional

antenna to receive information included in the data flow. Regarding this limitation,

Roberts teaches data flow received using omni directional antennas [see Figure 2]. At

the time of the invention, one of ordinary skill in the art would have been motivated to

combine the cited disclosures in order to implement wireless networks, as taught by

Roberts.

Allowable Subject Matter

24.   Claims 25-27 are allowed.

25.   Claims 4 and 17 are being dependent upon a rejected base claim, but would be

allowable if rewritten in independent form including all of the limitations of the base

claim and any intervening claims.

Conclusion

26.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time
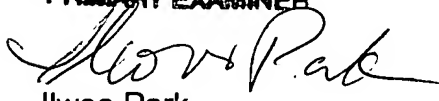
policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ilwoo Park whose telephone number is (571) 272-4155.

The examiner can normally be reached on Monday through Friday from 9:00 AM to 5:30

PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for

the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ILWOO PARK
PRIMARY EXAMINER

Ilwoo Park

December 14, 2006